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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,713	12/03/2003	Stephen M. Seibel	0315-482/COB	6373

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EXAMINER	
FREAY, CHARLES GRANT	
ART UNIT	**PAPER NUMBER**
3746	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/726,713	SEIBEL ET AL.	
	Examiner	Art Unit	
	Charles G. Freay	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *100-178* is/are pending in the application.

4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *100, 102-104, 106, 113-118, 120-122, 124, 131-137, 139-141, 143, 150-157, 159-161, 163 and 170-178* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12-2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 101,105,107-112,119,123,125-130,138,142,144-149,158,162 and 164-169.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of species 5 in species set 1, species 7 in species set 2 and species 1 from species set 3 in the replies filed on April 19 and July 7, 2005 is acknowledged. The traversal is on the ground(s) that all of the embodiments were considered in the parent application. This is not found persuasive because only proper traversal of an election of species requirement is an admission that the various embodiments are obvious variants of one another. The examiner recognizes that all of the species were considered in the parent application. However, due to the large number of embodiments an election is necessary to insure proper consideration of all the species. The examiner will make every effort to include as many of the non-elected claims with the elected claims in the event that the application is allowed.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 117, 135, 154 and 174 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 100, 103, 104, 106, 113, 114, 116, 157, 160, 161, 163, 170, 171, and 173 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda et al (USPN 5,447,418).

Takeda et al disclose a scroll machine having a first scroll (14), a second scroll (16), a drive member (7, 27), a discharge passage (15, 36) which extends through a plate member (2), the plate member is adjacent to the first scroll member and covers the entire first scroll member other than the discharge member, a first (60) and a second (62) seal member forming a chamber therebetween which receives fluid at an intermediate pressure by a passage (38). The first seal has a notch and as arranged will act as a one-way seal between the intermediate pressure chamber and the discharge chamber.

Claims 100, 102-104, 106, 114, 116, 157, 159-161, 163, 170, 171, and 173 are rejected under 35 U.S.C. 102(b) as being anticipated by Sano et al (USPN 5,743,720).

Sano et al disclose a scroll machine having a first scroll (1), a second scroll (2), a drive member (8), a discharge passage (1e) which extends through a plate member (4), the plate member is adjacent to the first scroll member and covers the entire first scroll

member other than the discharge member, a first (10) and a second (11) seal member forming a chamber therebetween (see Fig. 6) which receives fluid at an intermediate pressure by a passage (1d). The first and second seals are in a groove of the first scroll member. The seals are located in the same plane. As shown in Figs. 23 and 24 the seals can have a notch and act as a one-way seal between the intermediate pressure chamber and the discharge chamber.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 117 and 174 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Sano et al or Takeda et al.

As set forth above each of Sano et al and Takeda et al disclose the invention substantially as claimed but do not disclose that the seal is made of Teflon. The examiner gives official notice that making seals of Teflon is well known in the art and that it would have been obvious at the time of the invention to make the seals of either Takeda et al or Sano et al of Teflon in order to have more durable seals.

Claims 118, 121, 122, 124, 131, 132, 134-137, 140, 141, 143, 150, 151, 153-156 and 175-178 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al.

As set forth above Takeda et al discloses a scroll machine substantially as claimed but does not disclose a pulse width modulated vapor injection system. As noted by the applicant in paragraph [0082] compressor capacity adjustment by pulse width modulated vapor control is well known in the art. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art at the time of the invention to include a pulse width modulated vapor injection system in order to increase the capacity of the scroll machine above its capacity without such a device. The examiner gives official notice that making seals of Teflon is well known in the art and that it would have been obvious at the time of the invention to make the seals of either Takeda et al or Sano et al of Teflon in order to have more durable seals.

Claims 118, 120-122, 124, 132, 134-137, 139, 141, 143, 151, 153-156 and 175-178 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al.

As set forth above Sano et al discloses a scroll machine substantially as claimed but does not disclose a pulse width modulated vapor injection system. As noted by the applicant in paragraph [0082] compressor capacity adjustment by pulse width modulated vapor control is well known in the art. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art at the time of the invention to include a pulse width modulated vapor injection system in order to increase the capacity of the scroll machine above its capacity without such a device. The examiner gives official notice that making seals of Teflon is well known in the art and that it would have been obvious at the time of the invention to make the seals of either Takeda et al or Sano et al of Teflon in order to have more durable seals.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 100, 102-104, 106, 113-118, 120-122, 124, 131-137, 139-141, 143, 150-157, 159-161, 163 and 170-178 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-98 of U.S. Patent No. 6,679,683. The claims of the patent and the application set forth almost identical claim language. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant invention set forth that the entire first scroll member other than the discharge passage is covered by the plate member while the claims of the patent set forth that the entire first scroll member is covered by the plate member. The examiner notes that the claims of the patent also set forth that the discharge passage extends through the plate. Thus, clearly the plate covers the entire first scroll member other than the discharge passage.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Caillat et al and Seibel et al disclose similar scroll machines. Pham et al discloses a pulse width modulated scroll compressor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles G Freay
Primary Examiner
Art Unit 3746

CGF
September 3, 2005